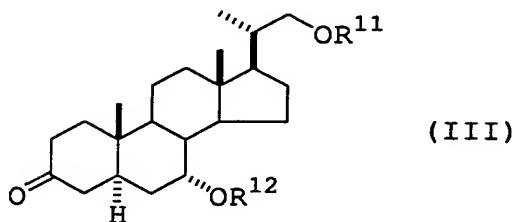
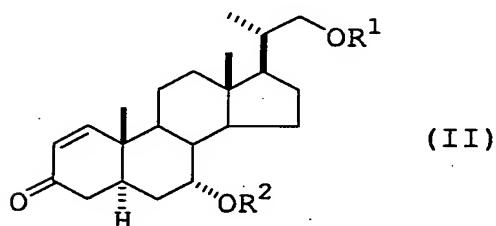


Claims

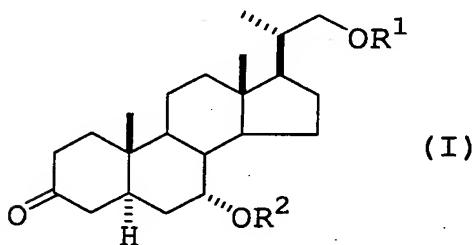
1. A method for producing a 5α -pregnane derivative represented by the formula (III):



5 wherein R¹¹ and R¹² are each independently a hydrogen atom or a hydroxyl-protecting group, which comprises selectively reducing a carbon-carbon double bond of a 5α -pregnane derivative represented by the formula (II):



10 wherein R¹ and R² are each independently a hydrogen atom or a hydroxyl-protecting group, in a mixture of a 5α -pregnane derivative represented by the formula (I):



15 wherein R¹ and R² are as defined above, and the 5α -pregnane derivative represented by the above formula (II).

2. The method of claim 1, wherein R² and R¹² are hydrogen atoms.

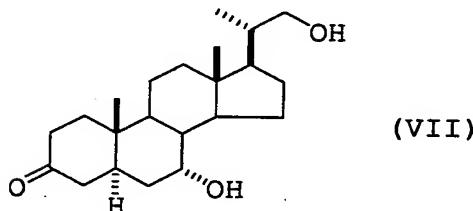
3. The method of claim 2, wherein R¹ and R¹¹ are tri-substituted silyl groups having three, same or different, substituents selected from the group consisting of an alkyl group optionally having substituent(s), an aryl group optionally

having substituent(s), an alkoxy group optionally having substituent(s) and an aryloxy group optionally having substituent(s).

5 4. The method of claim 3, wherein R¹ and R¹¹ are tert-butyldimethylsilyl groups.

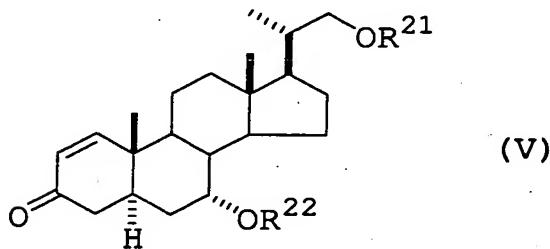
5. The method of claim 2, wherein R¹ and R¹¹ are hydrogen atoms.

10 6. A method for producing (20S)-7 α ,21-dihydroxy-20-methyl-5 α -pregn-3-one represented by the formula (VII):

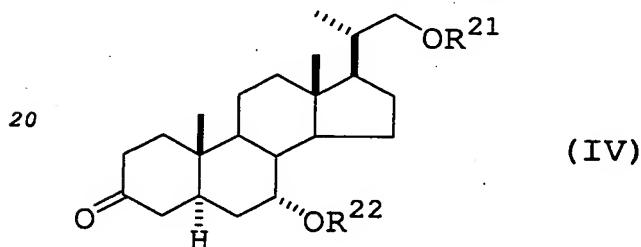


, which comprises

(a) selectively reducing a carbon-carbon double bond of a 5 α -pregnane derivative represented by the formula (V):

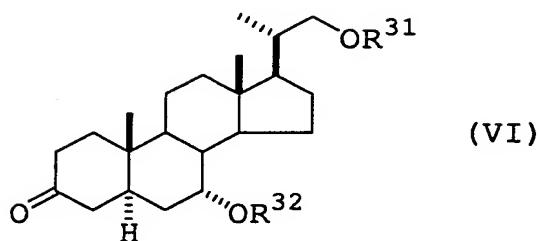


wherein R²¹ is a hydroxyl-protecting group and R²² is a hydrogen atom or a hydroxyl-protecting group, in a mixture of a 5 α -pregnane derivative represented by the formula (IV):



wherein R²¹ and R²² are as defined above, and the 5 α -pregnane derivative represented by the above formula (V) to give a 5 α -

pregnane derivative represented by the formula (VI):



wherein R³¹ is a hydroxyl-protecting group and R³² is a hydrogen

5 atom or a hydroxyl-protecting group; and

(b) eliminating the hydroxyl-protecting groups of the 5 α -pregnane derivative represented by the above formula (VI) obtained by the aforementioned step.

10 7. The method of claim 6, wherein R²² and R³² are hydrogen atoms.

8. The method of claim 7, wherein R²¹ and R³¹ are tri-substituted silyl groups having three, same or different, 15 substituents selected from the group consisting of an alkyl group optionally having substituent(s), an aryl group optionally having substituent(s), an alkoxy group optionally having substituent(s) and an aryloxy group optionally having substituent(s).

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9. The method of claim 8, wherein R²¹ and R³¹ are tert-butyldimethylsilyl groups.